Meeting Minutes

Project: K-rail Staking Configurations

Date: 11/02/05 Time: 1 PM

Attendees: John Jewell, Bob Meline, Malinda Gallaher, Greg Berry, Matt Schmitz,

Ken Kochevar, Gary Gauthier

1. Review of videos/photos from last test (#675)

- Vehicle rolled appeared high
- High roll is usual for safety-shaped barriers
- Roll comparison from all tests desired by committee
- Roll comparison from other PCB (NJ and F shapes) desired by committee
- Develop chart for side-by-side comparison of all tests (occupant impact velocity, ridedown acceleration, vehicle roll, maximum static and dynamic displacements)
- Barrier deflection (13.44") for test 675 was okay
- 2. Discussion on different staking configurations
 - Simple configuration to prevent confusion
 - Only one staking configuration per median and excavation
- 3. Criteria for passing
 - 350 criteria isn't enough
 - Committee needs to determine a criteria to pass tests
- 4. Important factors
 - Distance between barrier and excavation. (Greg 3" is a good distance. 0" is too close to the excavation and edge support could be an issue.)
 - Barrier deflection into excavation
- 5. Future testing
 - Test current standards (2' between barrier and excavation) for "zippering"?
 - Another excavation configuration will be discussed if test 675 doesn't pass the criteria
- 6. Pro and cons between 551 (fully staked with uncapped stakes) and 673 (fully staked, every other section, capped stakes)
 - 551
 - i. Pros: Simple design and stakes
 - 673
 - i. Pros: Less holes, installation time, and repairs. Easier to remove, due to stake cap (gripping point)
 - ii. Cons: Stakes are more complex and will cost more to manufacture.
- 7. Stake design
 - Welds will have to comply to current specs
 - How long will the stakes last? (fatigue)
 - Leave stake design to the contractor?